



US009504560B2

(12) **United States Patent**
Brady et al.

(10) **Patent No.:** **US 9,504,560 B2**

(45) **Date of Patent:** ***Nov. 29, 2016**

(54) **ACCOMMODATING INTRAOCULAR LENS
WITH OUTER SUPPORT STRUCTURE**

USPC 623/6.38, 6.4, 6.43, 6.46, 6.47, 6.49,
623/6.51, 6.52, 6.53, 6.54, 6.42
See application file for complete search history.

(71) Applicant: **Abbott Medical Optics Inc.**, Santa
Ana, CA (US)

(56) **References Cited**

(72) Inventors: **Daniel G. Brady**, San Juan Capistrano,
CA (US); **Michael D Lowery**, Irvine,
CA (US); **Marlene L Paul**, Laguna
Niguel, CA (US); **Stephen W Laguerre**,
Santa Barbara, CA (US); **Robert E
Glick**, Lake Forest, CA (US)

U.S. PATENT DOCUMENTS

1,483,509 A 5/1921 Bugbee
2,129,305 A 9/1938 William

(Continued)

(73) Assignee: **Abbott Medical Optics Inc.**, Santa
Ana, CA (US)

FOREIGN PATENT DOCUMENTS

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

AU 3225789 A1 10/1989
CH 681687 A5 5/1993

(Continued)

This patent is subject to a terminal dis-
claimer.

OTHER PUBLICATIONS

Amo Specs Model AC-21B, 1992.

(Continued)

(21) Appl. No.: **13/723,557**

(22) Filed: **Dec. 21, 2012**

(65) **Prior Publication Data**

US 2014/0012375 A1 Jan. 9, 2014

Related U.S. Application Data

(60) Division of application No. 12/840,843, filed on Jul.
21, 2010, now Pat. No. 8,343,216, which is a
continuation of application No. 11/322,068, filed on
Dec. 28, 2005, now Pat. No. 7,763,069, which is a
(Continued)

(51) **Int. Cl.**
A61F 2/16 (2006.01)

(52) **U.S. Cl.**
CPC **A61F 2/1624** (2013.01); **A61F 2/1629**
(2013.01); **A61F 2/1635** (2013.01); **A61F**
2/1648 (2013.01); **A61F 2/1694** (2013.01);
A61F 2002/169 (2015.04); **A61F 2002/1682**
(2015.04)

(58) **Field of Classification Search**
CPC .. A61F 1/1613; A61F 1/1681; A61F 1/1629;
A61F 1/1624; A61F 2/1624; A61F
2002/1682

Primary Examiner — David H Willse

Assistant Examiner — Javier Blanco

(74) *Attorney, Agent, or Firm* — Abbott Medical Optics
Inc.

(57) **ABSTRACT**

An intraocular lens for insertion into the capsular bag of an eye contains an optic, an outer periphery, and an outer support structure. The optic has a periphery and centered about an optical axis. The outer periphery is disposed about the optic and configured to engage an equatorial region of the capsular bag of an eye. The outer support structure is disposed along the periphery and spaced from the optic with voids outer support structure and the optic. The intraocular lens further comprises a first intermediate member and a weakened region disposed along the outer periphery between the outer support structure and the first intermediate member. The first intermediate member operably couples the optic and the outer support structure. The weakened region is attached to, and configured to provide relative motion between, the outer support structure and the first intermediate member in response to the ciliary muscle of the eye.

11 Claims, 11 Drawing Sheets

